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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,547

09/28/2006

Vladimir Bykovnikov

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45643

7590

02/12/2009

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EXAMINER

NGO, CHUONG A

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

02/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,547	Applicant(s) BYKOVNIKOV, VLADIMIR	
	Examiner CHUONG A. NGO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) 17-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 28-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/7/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I which include claims 1-16 and 28-30 in the reply filed on January 21, 2009 is acknowledged. Claim 17-27 (Group II) have therefore been withdrawn.

Drawings

2. The drawings submitted on September 28, 2006. These drawings are reviewed and accepted by the examiner.

Priority

3. Receipt is acknowledged of paper submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

4. The information Disclosure Statement (IDS) Form PTO-1449, filed on May 7, 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosed therein was considered by the examiner.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 28-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the

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time the application was filed, had possession of the claimed invention.

Applicant claimed "computer readable" which was not described in the specification.

Claim Rejections - 35 USC § 101

7. Claims 1-8 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent and recent Federal Circuit decisions indicate that a statutory "process" under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 8, 9, 28 are rejected under 35 U.S.C. 102(b) as anticipated by US Patent 5784368 (hereinafter Weigand).

Regarding claims 1, 9, 28 Weigand teaches “acquiring information about interfering base stations in a vicinity of a base station of interest (BSOI)” (see Fig. 8, Step 804 and Fig. 10, Step 1024 for acquiring and detecting interfering. col. 2, lines 31-64 each base station operating within range of another base station must be synchronized to prevent interference. Also Fig. 4);

Weigand teaches “choosing one of said interfering base stations as a master base station for said BSOI, wherein a master base station is a base station to which another base station is to synchronize” (see abstract, where Weigand discussed a master base station, i.e. Also see col. 4 lines 22-65 for the base station stores an indication that index N has zero occupied channels at a step 408).

Regarding claim 8, Weigand teaches “acquiring information includes receiving said information from said BSOI, wherein said information is accompanied by a request to assign a master base station to said BSOI” (see col. 7-9, the base station becomes a synchronization master and transmits a beacon message on the beacon slot at a step 1006. Also see Fig. 5-10 for sync distribution).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 4, 5-7, 10-16, 29, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5784368 (hereinafter Weigand) in view of US Patent Application Publication 20010014083 (hereinafter Pulkkinen).

Regarding claims 2, 6, 10-12, 15, 29 Weigand discloses most “interfering base and master base station and synchronizations” and all subject matter of the claimed invention concept except Weigand does not explicitly teach “multiple sync groups or sync group”. However, Pulkkinen teaches (see abstract, where Pulkkinen discusses sync group. Also see Fig. 3, 5, 7, 8 and claims 1 and 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Weigand invention as here multi sync as discussed by Pulkkinen (see paragraph 25).

Regarding claim 4, 13, 14, 30 Weigand discloses most “interfering base and master base station and synchronizations” and all subject matter of the claimed invention concept except Weigand does not explicitly teach “selecting a base station from said master sync group that is one of said interfering base stations as the master base station of said BSOI”.

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However, Pulkkinen teaches selecting master sync group (see paragraph 26 and 53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Weigand invention as how multi sync as discussed by Pulkkinen (see paragraph 25).

Regarding claims 5, 16 Weigand teaches “delivering an ID of said selected master base station and said new ranging rule to said BSOI and said selected master base station” (see Fig. 3, Col. 3, lines 46-67).

Regarding claim 7, Weigand discloses most “interfering base and master base station and synchronizations” and all subject matter of the claimed invention concept except Weigand does not explicitly teach “master/slave level with each synchronization chain”. However, Pulkkinen teaches master/slave synchronization (see paragraph 49-53 and Fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Weigand invention to enables the TDD terminals at a hub site to use the same radio channel, thus enhancing spectrum economy as Pulkkinen discussed (see paragraph 56).

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5784368 (hereinafter Weigand) in view of US Patent Application Publication 20010014083 (hereinafter Pulkkinen) and further in view of US Patent Application Publication 20030147362 (hereinafter Dick).

Regarding claim 3, Weigand and Pulkkinen discloses all subject matter of the claimed invention concept except Weigand and Pulkkinen do not explicitly teach “delivering an ID of said assigned master base station and a corresponding ranging rule to said BSOI”. However, Dick teaches assigned master base station (see paragraph 22. Also see Fig. 4.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Weigand and Pulkkinen inventions to provide the technique used to improve synchronization from each base station as taught by Dick (see paragraph 6).

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG A. NGO whose telephone number is 571-270-7264. The examiner can normally be reached on Monday through Thursday 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHUONG A NGO/
Examiner, Art Unit 2617

/NICK CORSARO/
Supervisory Patent Examiner, Art Unit 2617